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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/551,315  | 09/28/2005  | Aik Seng Yak         | NL 030309           | 6528             |
| 24737 7590 09/03/2008<br>PHILIPS INTELLECTUAL PROPERTY & STANDARDS<br>P.O. BOX 3001<br>BRIARCLIFF MANOR, NY 10510 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| BIBBINS, LATANYA  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2627  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/551,315

**Applicant(s)**

YAK ET AL.

**Examiner**

LaTanya Bibbins

**Art Unit**

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

**Group I**, claims 1-3 and 28, drawn to a method for determining axial speed of an optical lens of an optical disc drive and a disc drive apparatus designed to perform such method.

**Group II**, claims 4-6, drawn to a method for determining the sensitivity of a focal actuator of an optical disc drive.

**Group III**, claims 7-13, 16-22, and 25-27, drawn to a method for determining the distance between two reflective layers of an optical disc.

**Group IV**, claims 14, 15, 23, 24, 29, 30 drawn to a method for recognizing type of an optical disc and a disc drive apparatus designed to perform such method.

2. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The method for determining axial speed of an optical lens and the corresponding disc drive apparatus according to Group I (claims 1-3 and 28) lack the technical features corresponding to the method for determining the sensitivity of a focal actuator, the

method for determining the distance between two reflective layers of an optical disc, and the method and disc drive apparatus for recognizing type of an optical disc.

The method for determining the sensitivity of a focal actuator of an optical disc drive according to Group II (claims 4-6) lack the technical features corresponding to the method and corresponding disc drive apparatus for determining axial speed of an optical lens, the method for determining the distance between two reflective layers of an optical disc, and the method and disc drive apparatus for recognizing type of an optical disc.

The method for determining the distance between two reflective layers of an optical disc drive according to Group III (claims 7-13, 16-22, and 25-27) lack the technical features corresponding to the method and corresponding disc drive apparatus for determining axial speed of an optical lens, the method for determining the sensitivity of a focal actuator, and the method and disc drive apparatus for recognizing type of an optical disc.

The method for recognizing type of an optical disc and the corresponding disc drive apparatus according to Group IV (claims 14, 15, 23, 24, 29, 30) lack the technical features corresponding to the method and corresponding disc drive apparatus for determining axial speed of an optical lens, the method for determining the sensitivity of a focal actuator, and the method for determining the distance between two reflective layers of an optical disc.

***Election of Species***

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1. In the event that applicant elects inventions I, II, III, or IV, applicant must also elect a species.

The species are as follows:

- A. Method for determining the distance between two reflective layers of an optical disc based on the timing result of an S-shaped curve and on the timing result of characteristic events of the S-shaped curves (see Group III above).
- B. Method for determining the distance between two reflective layers of an optical disc based on the timing result of an S-shaped curve and on the timing result of characteristic events of data signal curves (see Group III above).
- C. Method for recognizing the type of an optical disc utilizing the time interval between characteristic events of two S-shaped curves (see Group IV above).
- D. Method for recognizing the type of an optical disc utilizing the time interval between characteristic events of data signal curves (see Group IV above).

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

- A. Claims 7-13 and 25-27 (corresponding to Group III, see above)
- B. Claims 16-22 (corresponding to Group III, see above)
- C. Claims 14, 15, 29, and 30 (corresponding to Group IV, see above)
- D. Claims 23 and 24 (corresponding to Group IV, see above)

The following claims are generic: NONE.

5. The Species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

- A. Species A has the special technical feature of determining the distance between two reflective layers of an optical disc based on the timing result of an S-shaped curve and on the timing.
- B. Species B has the special technical feature of determining the distance between two reflective layers of an optical disc based on the timing result of an S-shaped curve and on the timing result of characteristic events of data signal curves.

C. Species C has the special technical feature of recognizing the type of an optical disc utilizing the time interval between characteristic events of two S-shaped curves.

D. Species D has the special technical feature of recognizing the type of an optical disc utilizing the time interval between characteristic events of data signal curves.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

**6.** Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571)270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Bibbins/  
Examiner, Art Unit 2627

/Wayne Young/  
Supervisory Patent Examiner, Art Unit 2627